# RESEARCH/MANAGEMENT

"There are woods that are plain to look at, but not to look into..." ALDO LEOPOLD (1887-1948)



## **Gypsy Moth Suppression Program:**

County and Local Government Responses to State Management Initiatives

Jordan B. Petchenik and Rebecca L. Olson

### INTRODUCTION

The gypsy moth (*Lymantria dispar*), a non-native species, defoliates and weakens trees, particularly oaks, during periodic outbreaks that occur in June or July in Wisconsin. The moth was first introduced into eastern North America in the 1860s (Wisconsin DNR 2002). Through natural migration and accidental movement by humans, the gypsy moth spread slowly westward. In 1971, biologists first detected it in Wisconsin; the moth is now firmly established in 39 counties in eastern and central Wisconsin and has been found in nearly every county in the state (UW-Extension 2004, Wisconsin DNR 2004).

The Wisconsin DNR Gypsy Moth Suppression Program (Wisconsin DNR Suppression Program) is a voluntary program to suppress gypsy moth outbreaks through state-organized aerial insecticide treatments. Landowners receive treatment from the Wisconsin DNR Suppression Program through participating counties. Each county provides a coordinator who acts as a liaison between landowners, local government cooperators, and the Wisconsin DNR Suppression Program staff.

Participation in the aerial spray treatment allows communities and individuals to manage gypsy moth outbreaks at a lower cost than privately arranged treatments. The USDA Forest Service shares the expense of these aerial treatments and the associated administrative costs. It is the county's responsibility to pay the remainder of the expenses. The county may raise those funds any way it wants short of applying for a second federal grant.

### **METHODS**

We used teleconference-style interviews to assess opinions of both county coordinators and local government cooperators. This adaptation of the widely used focus group technique allows researchers to generate insights and ideas (Petchenik and Ivers 2003a). We used the teleconference technique instead of face-to-face meetings to help meet time constraints for the project and because

**Table 1.** Counties represented by county coordinators and local cooperators during teleconference-style interviews.

Brown	Marinette	Ozaukee	Waupaca
Door	Menominee	Portage	Waushara
Florence	Milwaukee	Shawano	Winnebago
Fond du Lac	Oconto	Washington	
Kewaunee	Outagamie	Waukesha	

face-to-face interviews of multiple coordinators and cooperators could not be arranged. Wisconsin DNR Suppression Program staff and materials presented in earlier reports (Petchenik and Ivers 2003a, 2003b) assisted us in developing the interview questions and discussion points.

Staff from the Bureau of Integrated Science Services conducted the interviews with 6 county coordinators representing 14 counties and 15 local cooperators representing 11 counties. Table 1 lists the 18 counties represented by coordinators and cooperators. We asked participants questions related to the management of the Wisconsin DNR Suppression Program. The Science Services moderator guided the discussion through the following sequence of topics:

- participant knowledge of gypsy moths and the Wisconsin DNR Suppression Program,
- sign up for Wisconsin DNR Suppression Program including related paperwork,
- county and local financial operations,
- treatment area boundary determination,
- public notice requirements,
- efficiency of treatment, and
- overall program satisfaction.

We recorded each teleconference and based our analysis on a verbatim transcript of each session. Here, we report the most significant findings, with illustrative quotations from interview participants presented in *Italic text*.

### RESULTS AND DISCUSSION

# Discovering the Wisconsin DNR Suppression Program

There were many differences in how county coordinators and local cooperators learned about the Wisconsin DNR Suppression Program. Prior to becoming county coordinators, interviewees learned of the Wisconsin DNR Suppression Program as part of their regular business contacts through the job they held at the time, or from the Wisconsin Department of Agriculture, Trade, and Consumer Protection's (Wisconsin DATCP) "Slow the Spread" program.

The way we got started in it is basically through [Wisconsin DNR staff member]. Of course what they were looking for was county coordinators for this area. That's how we got started.

Well, we were approached by the counties to take this on. It sounds like when we started out it was a lot more organized than when it [the Suppression Program] first started out, which is usual in any process.

I was familiar with it from entomology classes. I started taking egg mass counts and saw it for myself. Personally, I was out in the field and I saw those egg masses. We have a cabin and we saw the defoliation at our cabin.

When I applied for a trapper job with the State I found out about the program. Had to learn from my crew leader in the Trapping Program.

Learned about it through Department of Agriculture [as a trapper] and these areas had gone into quarantine. Eventually coordinators would need to be hired for [the] Suppression Program.

County cooperators learned about the Wisconsin DNR Suppression Program from various sources. Few county cooperators initially learned about the program from direct contact with the Wisconsin DNR. Sources include:

- contact with the Wisconsin DATCP "Slow the Spread" program,
- talking with other city and county foresters, and
- work or training in another state with a gypsy moth suppression program and assuming that Wisconsin had a similar program.

### Preparation for the First Spray Season

Participants indicated that working with the public was easier during the first spray season, but working with the Wisconsin DNR Suppression Program was more difficult. However, as time progressed, the opposite appeared to be true. County coordinators indicated minor start-up difficulties and credit Wisconsin DNR regional staff for helping them overcome problems.

[Wisconsin DNR staff person] was very responsive, was always there when you needed him. Even when he was off for three days, he would call us back on his cell phone. Somehow he would get the message. I thought he was very helpful.

Initially it's all very exciting but then after a while you fall into a routine, and yeah, you can keep it up – there [are] a lot of different things that keep interest up and excitement up but you know, you have to grab that interest from time to time.

We were always kind of prodding [Wisconsin DNR staff person] for information on the timing of everything because we like to give plenty of advance notice... we kind a were just in a holding pattern until we got the details on how the program was going to unfold.

# Training on Wisconsin DNR Suppression Program Duties

As people in both groups experienced more training on the full scope of gypsy moth related topics, their experience and satisfaction with the Wisconsin DNR Suppression Program improved. Overall, training was well received and much credit was given to Wisconsin DNR staff.

[Wisconsin DNR staff] had all these training sessions and we took a bunch of those training sessions. I might add that I think [Wisconsin DNR staff member] did an outstanding job on that.

The training was sufficient. Things went pretty smoothly. I guess the only problems that we have had are in our dealings with individual landowners.

Well, initially it was hands on kind of thing... [Now] I've been to all of the training programs that have been offered through the DNR and that's how it built up to the point that I think I have a good handle on what's going on.

# Interactions: County Coordinators, Government, and the Public

Overall, communication between local cooperators, county governments, and county coordinators (if different) was satisfactory. Coordinators indicated that they prefer to work with larger groups (e.g., townships or municipalities), but could adjust if that approach did not suit the needs or cultural climate of a given area. This was especially true in rural or smaller communities that lend themselves to more personal contact. Collecting payments seemed to be a concern for both groups.

Most of them [county employees] have been very good to work with, where an individual needs extra work. [Referring to times when the county coordinator needed assistance with a specific problem or area.]

When we can deal with the government, either a town or county, those have been relatively easy. It's when we need to deal with individual lake associations or individual landowners... Those are the ones where we've had difficulties.

When you talk to people on the street face to face, I would have to say 99% of the people out there are very nice, and, you know, they respond to what you're doing quite positively. If you talk to them on the phone, then people are more apt to 'ream' you out.

Unfortunately, when we have our public notification meetings, and also [the county's] annual budget meetings, the people who are there are objectors who don't really think that they should be sprayed. They usually have larger-acre parcels, and they don't want to pay the money, and they disagree that the town should pay.

### Paperwork and Deadlines

Interviewees viewed the amount of paperwork related to the DNR Suppression Program as appropriate. A few participants expressed concerns that they may have difficulty with the amount of paperwork if the number of spray blocks for their area increased over successive years. Both groups, however, were emphatic about their difficulties meeting the deadlines currently in place. This latter topic generated more comments than any other topic discussed in the sessions.

It seems like the paperwork has gotten a little more condensed. It's easier to follow through on, but it can always get better believe me. There's a lot that we have to do from our end and we definitely appreciate any less you can add [because the program is growing]. [Paperwork/Maps]... the deadline for submission the day after Thanksgiving weekend is not very effective. It needs to be a least a week after Thanksgiving... if that would have been December 8<sup>th</sup> it would have made a world of difference, because no one works Thanksgiving week.

There are a lot of people [that are needed to complete the GIS maps] gone hunting. So we generated those maps last week and then we started looking into them and there's some changes that need to be made and we can't get a hold of our GIS people because they are hunting.

The deadlines... we tried last year... didn't work. This year it's not working either. We are going to have to change some of the deadlines. We had a November 1<sup>st</sup> deadline for applications, which only gives me the month of November, to do the surveys, bill these people and do the maps. There just isn't time to do this.

I understand some of the requirements on the DNR, and also that some of them are established by the legislature, but I think that ... some of the deadlines are not realistic from a work standpoint. I think that's also why some counties have chosen to [use a] consultant [instead of hiring a new employee or delegating gypsy moth tasks to current employees]. It helps facilitate the workload issue.

[When people sell their homes there is a three month] turnover time [before the records are updated] and with the landowner notification letters, we have a certain amount of time that they can object. I believe it is only two weeks or something like that. Then the new landowner isn't going to get that time, which is a problem – it can be a problem.

### **Financial Operations**

Overall, both participant groups appeared to be doing well with financial operations. Participants made a wide range of comments on financial matters, possibly because of a wide range in ways they handle payments.

It's gone pretty smoothly. We are going to be dealing with a lot more small landowners this year so we may have a different story to tell in a couple months...

We just learned that we were going to have to make the people in [the] county realize that I didn't have the time to research every person in that block. We now make them have one block coordinator and that person will get the bill and that person is responsible for paying for it.

It seemed to go fairly well. Initially, we had to convince the [county] board and the public that the special charge for their remaining costs was necessary. And I had to convince some of the staff, but I think they've seen that it's worked out fairly smooth.

Our biggest frustration in the program is to try to get everyone to follow the rules. I am not making an exception for this lake, when I made this other lake [pay by the deadline].

### Mapping

The new requirements for digitizing the spray block maps were well received. There were few negative comments and the comments we did get reflected previously mentioned issues with deadlines. Most participants were satisfied with the process of providing digitized maps to the Wisconsin DNR Suppression Program.

This year we are dealing with something new; large chunks of land owned by a club. They now have their own private forester... So here I drew it up one way, and then the forester does it another way, so I guess getting a finalized map from some of these people is the hardest thing I have to do.

I am glad to see that we no longer have to make quad maps.

I determine where the boundaries are going to be with each block... I contact an engineer on staff and he works directly in this building... We figured out what needed to be done. He specializes in GPS/GIS systems and it goes pretty smoothly.... I work when he is available.

### **Public Notice Responsibilities**

Most participants understood what their public notice responsibilities are, however, some expressed being a little "consumed" by the scope of these duties. Some of the comments indicate difficulty when working with individuals or groups that have high emotions or sensitivity levels.

Public notice is all part of the original package when we were presented with the county coordinator responsibilities so we basically just follow through with those responsibilities. We prepare the media news releases, etc... then the counties or towns distribute it. It is a fairly straightforward process. Don't add to it. I don't have too much different to suggest.

Once the maps are in to the DNR that is what I start doing. I go right to the computer and I have names and addresses. I start printing out labels. These are the people that have to get a letter. And we have to pass out the info, and I do it.

I spent a lot time working with areas that didn't qualify, in which case I explain why they don't [qualify] and what we propose to do then for the coming year, what they can do as a resident, [and] what I can provide them as a service from the city.

I felt the need to have additional meetings and opportunities for the public to get involved in this — in case they missed the county meeting that was held and find out what was going on and have a one-on-one contact... along with discussing the map of the suggested area. So, it's worked for us to hold additional meetings beyond the required one... it cuts down a lot on the calls I receive...so in effect it saves time.

### **Overall Program Satisfaction**

Overall, both local coordinators and county cooperators were satisfied with the Wisconsin DNR Suppression Program and the role that they play in its implementation.

I would get calls later, after the spray, toward the end of June and into July and [landowners] are thrilled with the results. They can't tell you enough how nice it is to be able to walk out in their yard and not have caterpillars everywhere. So, I think we just need to get the tweaks out of it... we do a tremendous amount of spraying and I have to think it's because the program is run pretty well.

Yes, it's worth it from pretty much a number of different ways... environmentally... you don't replace those trees... politically... because the citizens see us out there... The program is effective.

I think it's dollars spent wisely both on the state and local level in addressing this, because... if a sewer line goes out, you know, you can fix it in a year if it is a long line... once these trees die, that's it.

### **Additional Suggestions and Concerns**

During the sessions, participants shared several concerns and suggestions for improvement that were outside the scope of the moderator's inquiries. Categories of concerns included:

# Public Perceptions and the Need for Education on Gypsy Moth Topics.

I am a bit skeptical about these residential areas where you are spraying a block and then you are spraying another block, and then you are spraying every two years. It just seems redundant. The public is going to notice.



Bureau of Integrated Science Services
Wisconsin Department of Natural Resources
P.O. Box 7921
Madison, WI 53707

Presorted Standard U.S. Postage Paid Madison, WI Permit No. 906



PUB-SS-751 2004

Well, probably too late now, because it's half way across the state. But it would have helped... if we would have been more aware of how gypsy moths were spreading, how they spread, what they look like, all those types of things, so we could have identified it before we had the problem.

[Referring to people with low caterpillar counts] 'I just want my area sprayed.' I think at times for some of those people, we could send planes over with water, and it would be one of those placebos, people would think it was better next year.

# Communicating to Landowners the Criteria for Participation.

If you do not have the priority trees, the oaks, the birch, the lindens and those sort of trees, but you have large numbers of egg mass counts you don't qualify. So that's very disappointing. You know you've got a willing agency [organized landowners] that wants to get something sprayed, however, it doesn't meet the qualifications.

### MANAGEMENT RECOMMENDATIONS

Interview results suggest an overall satisfaction with the Wisconsin DNR Suppression Program. There are key areas, however, that should be addressed if the program hopes to maintain that level of satisfaction as it expands.

The most prominent suggestion we heard is that deadlines should be adjusted. Both participant groups had difficulty accomplishing the tasks for submitting applications to the program in the allotted time frame. Local coordinators had to overcome timing difficulties when attempting to obtain needed application information during the week of the Thanksgiving holiday. Both groups expressed concerns that they may not be able keep up with demand if gypsy moths became more prevalent in their area and continued to spread across the state.

Interviewees suggest further need for assistance and training to work with the public. This has been a recurring issue with the Wisconsin DNR Suppression Program (Petchenik and Ivers 2003a, 2003b). Participants interviewed for this particular study indicated two informational and educational needs: (1) better coordination of public information and education activities by the Wisconsin DNR Suppression Program, and (2) training on how to work with the public when introducing potentially emotional subjects.

### LITERATURE CITED

Petchenik, J.B. and Ivers, E. 2003a. The gypsy moth and methods of control: Public response to a proposed gypsy moth management program. *Research/Management Findings* (48):1-4. Bureau of Integrated Science Services, Wisconsin Department of Natural Resources, Madison.

Petchenik, J.B. and Ivers, E. 2003b. The gypsy moth and tolerance of moth larvae, tree defoliation, and tree mortality: Public response to a proposed gypsy moth management program. Research/Management Findings (50):1-4. Bureau of Integrated Science Services, Wisconsin Department of Natural Resources. Madison.

University of Wisconsin-Extension. 2004. "Gypsy Moth in Wisconsin: History and Spread." Retrieved May 2004 from University of Wisconsin-Extension web site: <a href="http://www.uwex.edu/ces/gypsymoth/history.cfm">http://www.uwex.edu/ces/gypsymoth/history.cfm</a>.

Wisconsin DNR. 2002. "Gypsy Moth Awareness Week." DNR News, Special Edition, October 3, 2002. Retrieved May 2004 from Wisconsin DNR web site:
<a href="http://dnr.wi.gov/org/caer/ce/news/specialedition/gypsymoth2002.htm">http://dnr.wi.gov/org/caer/ce/news/specialedition/gypsymoth2002.htm</a>>.

Wisconsin DNR. 2004. "Gypsy Moth Suppression Spray Areas." Retrieved May 2004 from Wisconsin DNR web site: <a href="http://dnr.wi.gov/org/land/forestry/fh/gm/spray\_areas/">http://dnr.wi.gov/org/land/forestry/fh/gm/spray\_areas/</a>>.

### **ABOUT THE AUTHORS**

Jordan Petchenik is a resource sociologist with the Wisconsin DNR's Bureau of Integrated Science Services. His two principal research interests include human dimensions of outdoor recreation and social science methodologies. Rebecca Olson is a free-lance writer and editor. She has worked with the Wisconsin DNR since 1999 and has an interest in writing and communication about human health, natural science, and cultural topics.

### Address:

Wisconsin DNR

Bureau of Integrated Science Services PO Box 7921, Madison, WI 53707-7921

**Telephone:** (608) 266-8523

E-mail: Jordan.Petchenik@dnr.state.wi.us

**Editors:** Martin P.A. Griffin and Dreux J. Watermolen

Layout: Michelle E. Voss